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CANNONVILLE SOIL CONSERVATION NEWS

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

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C. L. Veatch, Project Manager

Dear Cooperator:

You are in possession of our second newsletter. This letter brings to you information about kudzu and meadow strips. Since both kudzu and meadow strips are to be given important places in our erosion control program, we are anxious that the farmers of the Cannonville project area be thoroughly familiar with the place and use of kudzu and meadow strips in conserving the soil. Read these articles carefully. The information contained in them will serve as a guide in helping you and our contact men in working out a good land use program.

We repeat our invitation to you to come in to see us when you have problems to discuss or constructive suggestions to make.

C. L. VEATCH
Project Manager

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KUDZU, A FORAGE CROP AND SOIL BINDER.

Kudzu is a vigorous growing perennial vine belonging to the group of plants called legumes. It is valuable for forage, for grazing and for preventing the washing of the soil. It may be grazed or cut for hay, but in either case it must be handled with care if good results are to be had over a long period. Over grazing will destroy the crop, and cutting too often will reduce the stand until the field is no longer profitable.

Habit and Soil Preference: The kudzu root sends out several shoots, their number depending upon its age and vigor. These shoots trail on the ground or climb any available support. They have been known to grow 70 feet in one season. Stems that lie on the ground root at the joints and

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thus establish new plants. When a field becomes well set with plants, new, erect, twining stems grow out from the main runners, often forming a mass of stems and leaves 2 to 4 feet deep. Kudzu will do well on most any of the soil types found in this section, provided the soils are reasonably well drained. It does best on good clay loams.

Cultivation: Kudzu plants may be put out from November first to March ~~first to fifteenth~~. Before a kudzu field may be used for hay or for grazing, there must be many more rooted plants per acre than were set. It is therefore important that the plants be cultivated for the first year or two in order that weeds may not interfere with the establishment of new plants from the first runners. The Georgia State College of Agriculture places the required number of plants at three or four to every square yard of surface. This large number must come from the rooted joints and the joints cannot root unless they lie on moist ground. Weeds interfere with this as the vines climb over them. Some cultivation is imperative if a good stand of plants is to be had.

How to Use Kudzu: When once well established a field of kudzu may be ~~used many years~~ for hay or pasture, provided it is used right. Kudzu is not indestructible. In fact, alfalfa is less easily killed by abuse than is kudzu. If the crop is to be used for hay only two cuttings per year should be made; these cuttings should be made in June and October. If more than two cuttings per year are made, reserve material in the roots may become exhausted and the stand destroyed. It is best to cut for hay when there is a good season in the ground.

Kudzu is a good pasture plant, but when overgrazed the stand is materially reduced and the crop may be completely destroyed. Since kudzu withstands drought, it is well to reserve this crop for late summer or fall grazing when grass pastures are poor. Rotation grazing is also recommended.

Yields and Quality of Hay: A yield of ten tons of hay per acre has been claimed, but such a yield is so extraordinary as to indicate that the report is unreliable or that the case was very exceptional. The Alabama Experiment Station reports an average yield for three years of two tons per acre. The Georgia College of Agriculture reports a yield of one to four tons an acre. A farmer who lives in the Gainesville soil conservation demonstration area reports that he cut 5,500 pounds of cured hay per acre from his kudzu field in 1935.

Kudzu makes good hay. It has about the same feeding value as alfalfa. It cures readily and well. Its leaves do not fall in curing and livestock like the hay.

Kudzu for Erosion Control: In gullies and on steep slopes a heavy growth of kudzu gives a substantial protection against soil erosion. It literally ties or binds the soil. This crop when fully established will stabilize even large gullies. In such situations a limited amount of

grazing can be allowed and kudzu will not only prevent further erosion but also will give the farmer some return from the land.

Kudzu not a Pest: We want to emphasize the fact that kudzu is not a pest. True, the growth, if uncontrolled, will make a tangle of vines likely to smother bushes and even small trees, but heavy grazing or cutting at once reduces the stand and weakens the growth. This crop is much easier to destroy than is bermuda or even alfalfa. The strong, vigorous growing quality of kudzu that makes it a pest to the careless farmer is one of its greatest virtues for the industrious farmer who wants good yields of forage.

NOTE: Credit for much of the information contained in this article is due to authors of United States Department of Agriculture Leaflet No. 91 and Georgia State College of Agriculture Bulletin No. 356.

MEADOW STRIPS IN EROSION CONTROL.

A meadow strip as here designed serves as an outlet for terraces draining into it from bordering fields. It is located in a swale or depression which serves as a natural drain. The width of the strip varies according to the natural width of the depression, ranging from 25 to 100 feet. The width must be sufficient for the edges of the strip to be 1 or 2 feet higher than the center, thus eliminating the danger of cutting and gullyng on either side. The wider the strip, the greater the spread of water and the less likelihood of cutting.

The water must be conducted slowly from the field to a point where other methods of control can be brought into use. The area of the strips constructed or to be constructed in this area will vary from a quarter of an acre to three or more acres.

The factors which govern the location of the meadow strip are slope, drainage area, the presence of gullies, the existence of sufficient topsoil for a good sod, and the natural width and length of the depression.

As a rule, a certain amount of machine grading is necessary. Grading provides a slight slope towards the center, draws the water from each terrace, thus causing a spreading rather than a concentration of water at each terrace end.

After grading, temporary ditches are cut around the strip to keep excess run-off water from injuring the new seeding. After a good sod is established, these temporary ditches are filled and the water from the terraces is allowed to empty on the strips.

Various kinds of vegetation will be used on these strips. Two of the strips on which no machine grading was necessary have been planted to kudzu. After this kudzu is well established, it will be cut for hay.

Another strip located on the farm of B. F. Whitaker was machine graded and temporary V-type ditches cut around the strip. The upper part of the strip has been sodded to bermuda and lespedeza. The lower part of the strip was planted to a thick stand of black locust. This strip will supply the farmer with a good hay crop and eventually will provide all the fence posts needed on the farm.

Every effort will be made to obtain and maintain a good substantial sod or other vegetative cover. Spots of low fertility will be mulched, and liberal applications of a good commercial fertilizer will be made. Washes which may occur from hard rains falling shortly after seeding will be immediately mended.

The advantages of meadow strips over outlet channels fortified with concrete spreaders are many. Some of these advantages are:

1. It is cheaper to construct.
2. It can be crossed with ordinary farm machinery.
3. The meadow strip will provide a good hay crop, or if fenced, may be used for grazing.
4. If set to locust these strips will serve as a source of fence posts in some eight to ten years.

LEAVE SPACE FOR BUILDING TERRACES.

We urge those of you who have signed cooperative agreements to leave space for building terraces. This is for your benefit as well as for the convenience of the Service. We are anxious to keep our terracing outfit operating throughout the summer months. If we are to accomplish this, it will be necessary for us to have your cooperation.

When the terrace lines are located by our engineers, leave a space about eight feet wide on each side of this line. Then we can proceed with the construction of the terraces even after the crops are planted. The loss that may accrue to you from not being able to plant these strips to cotton or corn may be small compared to the greater loss that will result from the washing of your soil on the unterraced fields.

We assure you that every precaution will be taken to avoid the destruction of your crops while we are building your terraces. Your cooperation in this matter will be greatly appreciated.

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